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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/752,588 | 12/27/2000 | Adam T. Lake | 42390P10255 | 1641 |

7590 03/18/2005
James H. Salter
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
Seventh Floor
12400 Wilshire Boulevard
Los Angeles, CA 90025-1026

| EXAMINER |
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AWAD, AMR A

| ART UNIT | PAPER NUMBER |
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2675

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/752,588

Applicant(s)

LAKE ET AL.

Examiner

Amr Awad

Art Unit

2675

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-30 and 41-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-30 and 41-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/24/04
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/22/2004 has been entered.

Information Disclosure Statement

2. The references cited in the information disclosure statement received on 09/24/2004 have been considered by the Examiner; see attached PTO-1449.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 21-30 and 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lander et al. (US patent NO. 5,984,880; hereinafter referred to as Lander) in view of Gouzman et al. (US patent NO. 6,278,441; hereinafter referred to as Gouzman).

As to independent claim 21, Lander (figure 4) teaches an apparatus that includes a first feedback device (51) to generate a signal in response to a stimulus (col. 3, lines 65-67), a transmitter (the wire connecting the computer (54) to the first feedback device) coupled to the first feedback device (51) to transmit the signal over a network (55) coupled to the transmitter (col. 4, lines 41-48), a receiver (wire connecting the network 55 with computer 53) coupled to the network 55 to receive the signal from the transmitter, and a second feedback device (52) coupled to the receiver to reproduce the stimulus responsive to the signal (col. 3, line 65 through col. 4, line 4, and col. 4, lines 38-55). Note that Lander shows that the device can use joystick (i.e., input device to simulate the force feedback (col. 14, lines 53-59).

Lender does not specifically show that the first and second feedback devices include haptels (i.e., first and second haptels). Note that Lender (figures 1A-1D and figure 3) describes the way in which the artificial hand is functioning (by providing a plurality of force feedback assembly (1/15), which may qualify as haptels.

However, Gouzman (figures 5A and figures 6A-6B) shows a tactile interface system (input device 200) that includes a plurality of haptels (pins 214) to allow the user to feel the tactile interfacing between the user and the device (col. 9, lines 1-12).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teaching of Gouzman having a plurality of tactile pins (haptels) to represent the body of the first and second feedback devices of Lander, so as motivated by Gouzman, to be able to maximize the interaction with the input device to the visually impaired users (col. 2, lines 1-8). Furthermore, having

Art Unit: 2675

plurality of feedback elements in the device of Lander is essential to the device so that it can emulate the movement of the actual part of a human body.

As to claim 22, as can be seen in figures 6A-6B, and the specification, Gouzman shows an array of haptels (pins 214) to form a display.

As to claim 23, Lander shows that the stimulus can be a Biofeedback (temperature, brainwave, body moisture, etc.) (Col. 8, lines 35-41).

As to claim 24, as can be seen in figure 3, Lander shows that the second device is configured into a computer system-pointing device (joystick 52). Gouzman also shows that the device, which includes the haptels, is a mouse (200).

As to claim 25, Lander shows having the tactile feedback as using temperature feedback (col. 14, lines 46-49), which inherently will include thermoelectric device to transfer the temperature into electric signal that can be read by the device.

As to claims 26-30, the claims are method claims correspond to the apparatus of claims 21-25, and would be analyzed as previously discussed with respect to claims 21-25 above.

As to claims 41-42, the claims are substantially similar to independent claims 21 and 26, except that the claims are specifying that the response of the first and the second haptels is due to the stimulus by the second and first haptels, which is taught by Lander (col. 3, line 65 through col. 4, line 4).

As to claim 43, Lander shows that the stimulus can be a Biofeedback (temperature, brainwave, body moisture, etc.) (Col. 8, lines 35-41).

Art Unit: 2675

Response to Arguments

5. Applicant's arguments with respect to claims 21-30 and 41-43 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amr Awad whose telephone number is (571) 272-7764. The examiner can normally be reached on Monday through Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571)272-3638. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A. A.

AMR A. AWAD
PRIMARY EXAMINER

